

REMARKS

Claims 1-12 are pending in this application. Claims 1, 5, and 10 are amended herein. Claim 11 is canceled. Claims 13 and 14 are added. Accordingly, Claims 1-10 and 12-14 are pending after entry of this Amendment.

Support for the claim amendments is found throughout the specification as originally filed. For example, support for the amendments to Claims 1, 5 and 10 and new Claims 13 and 14 is found at least at paragraph [0063] of the specification, FIG. 5, and original Claim 5. No new matter is added.

The claimed inventions are directed to methods and platens for analyzing properties of a set of substances. The platens include an inner layer of hydrophilic material and two outer layers of hydrophobic material. The platens also include a two-dimensional array of addressable through-holes having an areal density of at least 1.6 through-holes per square millimeter. Each through-hole has at least one wall containing at least one hydrophilic region. A set of distinct substances is applied as a coating to the hydrophilic region of the walls the through-holes of the platen.

35 U.S.C. § 103(a)

The Office Action rejects Claims 1-12 under 35 U.S.C. § 103(a) over U.S. Patent No. 4,682,890 to de Macario (hereinafter “de Macario”), U.S. Patent No. 5,290,705 to Davis (hereinafter “Davis”), and U.S. Patent No. 5,876,226 to Böcker (hereinafter “Böcker”). Applicant respectfully disagrees with this rejection.

de Macario is directed to a “microsample holder” for spectrophotometers having a circular holes “on the order of about 3 mm in diameter” for retaining a liquid sample. de Macario, col. 2, lines 60-65.

Davis is directed to “a specimen support for observation or analysis,” in particular for infrared microspectroscopy. Davis, col. 1, lines 53-55. Davis does not discuss reactions between samples, but instead shows a single liquid specimen applied to a device in such a manner to permit interrogation with infrared light. See Davis, col. 3, lines 24-27.

Böcker is directed to a “net” brought into contact with a liquid such that the liquid spreads across the meshes of the net to form a liquid film. Böcker, col. 2, lines 42-45.

Page 3 of the Office Action states that the paragraph bridging columns 10-11 of de Macario discusses the addition of reagents and samples to the holes of de Macario's device. The cited paragraph discloses that "reagents or biologicals may be pre-anchored to the circular surfaces of the thin, flat dishes or the inner surfaces of the circular perforated webs which comprise the retaining elements." de Macario, col. 10, lines 58-62.

Although de Macario does not define "pre-anchored", the verb "anchor" is well understood to mean "to secure firmly". Webster's New Collegiate Dictionary 42 (1979). Within the biotechnology field, one of skill in the art at the time of de Macario would have understood anchoring to refer to the covalent bonding of a substance to a substrate. For example, U.S. Patent No. 4,663,163 to Hou, et al. discusses an "anchoring group" as "a chemical group capable of causing the covalent coupling of [...] comonomer (b) to an affinity ligand". Hou, col. 10, 50-54.¹ Thus, the plain meaning of the term "anchor" is inconsistent with Applicant's claimed coatings.

Unlike the coatings recited by currently amended Claims 1 and 10, which are retained on the hydrophilic regions of the walls of the through-holes, the covalent bonds implicitly found in the anchors referenced by de Macario are not retained by a hydrophilic region, but rather by covalent bonding with anchor groups as understood in the art.

Accordingly, Applicant respectfully requests the withdrawal of the rejection of Claims 1-10 and 12 under 35 U.S.C. § 103(a) over de Macario, Davis, and Böcker.

The Office Action also rejects Claims 1-12 under 35 U.S.C. § 103(a) over de Macario, Davis, and U.S. Patent No. 6,071,748 to Modlin (hereinafter "Modlin") or U.S. Patent No. 5,985,214 to Stylli (hereinafter "Stylli"). Applicant respectfully disagrees with this rejection.

Modlin is directed to "an apparatus and method for detecting light transmitted from a composition" including a stage, a light source, and a detector. Modlin, col. 4, lines 11-27.

¹ The understanding of "anchor" from Hou remained valid at the time of Applicant's invention. For example, U.S. No. 5,242,974 to Holmes states that "[a] first site (Z) is used to anchor the tether molecule, directly or indirectly via linker molecules to a substrate." Holmes, col. 6, lines 51-54. The bonding of site (Z) to substrate (2) is illustrated in Figure 1a of Holmes.

Stylli is directed to "systems and methods that utilize automated and integratable workstations for identifying chemicals having useful activity." Modlin, col. 2, lines 35-41.

As discussed above, neither de Macario nor Davis teach or suggest platens including coatings retained on the hydrophilic regions of the walls of the through-holes. Neither Modlin nor Stylli remedy this deficiency. Thus, neither de Macario, Davis, nor Modlin or Stylli, either alone or in combination teach or suggest the inventions of Claims 1 and 10.

Accordingly, Applicant respectfully requests the withdrawal of the rejection of Claims 1-10 and 12 under 35 U.S.C. § 103(a) over de Macario, Davis, Modlin, and Stylli.

DOUBLE PATENTING

Claims 1-12 are rejected under the judicially created doctrine of obviousness-type double patenting over claims 1-11 of U.S. Patent No. 6,743,633. Claims 10-12 are also rejected under the judicially created doctrine of obviousness-type double patenting over claims 1-14 of U.S. Patent No. 6,387,331.

The Office Action on page 8 indicates that these rejections can be overcome by the timely filing of terminal disclaimers in compliance with 37 C.F.R. §1.321(c) or §1.321(d). Accordingly, Applicant is concurrently filing two terminal disclaimers in compliance with 37 C.F.R. §1.321(c). Applicant submits that in view of the filing of the terminal disclaimers, the rejections are overcome. Therefore, Applicant respectfully requests withdrawal of the rejections.

In view of the foregoing, Applicant requests entry of this Amendment, reconsideration of all the rejections, and allowance of the application with claims 1-10 and 12-14 presented herein. If a telephone conversation with Applicant's representative would be helpful to expedite prosecution of the application, Applicant urges the Examiner to telephone the undersigned at the number indicated below.

Applicant believes that no fees are due other than fees for the filing of a Three-Month Extension of Time, Request for Continued Examination, and two Terminal Disclaimers. If additional fees are required, the Director is authorized to charge any

fees associated with this submission to our Deposit Account, No. 04-1105, Reference 65689DIV3(43382). Any overpayment should be credited to said Deposit Account.

Dated: September 3, 2008

Respectfully submitted,

By: /Brian R. Landry/
Brian R. Landry
Registration No.: 62,074
Christine C. O'Day
Registration No.: 38,256
EDWARDS ANGELL PALMER & DODGE LLP
P.O. Box 55874
Boston, Massachusetts 02205
(617) 239-0100
Attorneys For Applicant

Customer No.: 21874